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Development of East Asia Regional Production Network and the Status of Participating of China

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Abstract

With the transformation of the international division of labor pattern, the East Asia[1] regional economy also broke through the original "Flying Geese Model" to form the East Asia production network, and became an integral part of the global production network. As the center of the East Asia production network, the trade volume inside the region of China rose year by year, which was displayed by importing the parts and components in quantity from the region and exporting to USA, EU and other countries outside the region with the manufactured goods upon processing. It has always played an intermediate hub role in the "Star Trade" inside and outside the East Asia region, resulting in the export benefits shared by various countries of East Asia for a long time. Moreover, the favorable balance of trade has recorded the situation of continuously increasing trade friction in China. This paper analyzes the reason for the formation of the East Asia production network, and further discusses the characteristics of the East Asia regional production network, with the main expression of three aspects involving the decentralization, "Star Trade", and vulnerability of the regional production network. Based on this, it analyzes the coinditions for the intermediate goods trade and final manufactured goods trade of China in the East Asia regional production network, points out the hub status of China in the East Asia regional production network, and analyzes the characteristics of the industry of China participating in the East Asia regional production network. This paper finally proposes the measures that China should improve the utilization rate of the free trade area in the East Asia regional production network, coordinate and unify, simplify the preferential rules of origin, and adopt the incentive measures to attract the medium-sized and small enterprises to join the regional production network, so as to enhance the operating efficiency of the overall East Asia regional production network.

Key words: Preferential rules of origin; East Asia regional production network; "Star Trade"

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INTRODUCTION

Since 1990s, with the development of the international economic globalization, the international division of labor pattern has been deeply transformed from the initial inter-industry to intra-industry, and finally the intra-product evolution has been finished. Such intra-product division of labor production mode makes the productive process of the same final product split into several links, which shall be produced dispersively in the most efficient countries or areas with the lowest cost in accordance with the comparative advantages of every country. Moreover, this new-type international production mode organically integrates the participants and leaders of different levels

[1] This paper regards China, Japan, Korea, ASEAN countries (Brunei, Cambodia, Malaysia, Indonesia, Laos, Myanmar, Singapore, Philippines, Thailand, Vietnam) as the research objects.

in the international economic stage nowadays, and forms the global "International Production Network (IPN)". For more than ten years, such global production specialization has created new division mode of the labor force among the East Asia economies, especially the Southeast Asia. The rapid development of the production network has changed the production mode of East Asia and internation trade mode, and the trade inside the region is expanded through the cross-booder transaction of parts and components. By the Asia input- output table of JETRO, it showed that the international fragmentation of production of Asia has evoluted extensively and deeply from the simple south- north overseas processing trade development, known as "Asian Factory" (Baldwin, 2008).

The international production network initially permeated into East Asia in 1960s, and the USA semiconductor company and Texas company built the assembly shop in Singapore. In the late 1970s, the multinational corporation with the production equipments in Singapore began to configure the final processing and assembly link in the neighbouring countries especially in Malaysia, Philippines and Thailand. A number of multinational corporations began to set up the production base in these countries. Singapore became the regional center for designing and assembling the components and parts, as well as the total service sector for producing the configuration in the neighbouring countries. In the mid-1980s, the north and south intra-industry trade in Asia appeared, and also grew swiftly. In 1990s, importing from the USA, Japan and emerging Asian economies rose significantly. In recent years, as the global production center for the components and parts, the occurrence of China has reinforced the the interlinkage of the country in the aspect of the international production chain, and the success in the exporting of manufacturing industry in China has obviously relied on the importing of the components and parts from the countries in East Asia and Southeast Asia. Therefore, in the past 20 years, the development of the international production network in Asia has been the result of a dynamic decision that the multinational corporations adapted to the trade and business environmental change. With the formation and development of the international production network, the East Asia region also broke through the original "Flying Geese Model" to form the East Asia production network.

1. FORMATION OF EAST ASIA PRODUCTION NETWORK

At the beginning of the early 1960s, the countries and areas represented by Japan and East Asia "Four Little Dragons" achieved the economic takeoff and created the remarkable "East Asia Miracle" during the short term of about 30 years, and meanwhile generated the prevailing "Flying Geese Model" from 1960s to 1990s. Nevertheless, with the economic development of various countries in East Asia, "Flying Geese Model" was confronted with tremendous challenges since 1990s. The industrial gradient difference among Japan, "Four Little Dragons", China, ASEAN and other countries was the foundation of producing "Flying Geese Model". However, the economy of Japan has been continuously sluggish, East Asia "Four Little Dragons" and China developed rapidly, and even formed the horizontal division of labor with Japan in some field of the high- technology industry, resulting in the increasingly reduction of the industrial gradient difference among the economy in various countries of East Asia, and the gradual decline of "Flying Geese Model". Some countries in Southeast Asia also began to change the excessive dependence on "Flying Geese Model", actively explored the new model of regional economic cooperation and made the adjustment and reformation. Just as Fukunari Kimura (2010) pointed out, the development of East Asia free trade area promoted the liberalization of the trade and investment, and further promoted the development of the regional production network. The developed economies with the abundant technology and capital involving Japan and Korea launched out into the upstream production processes of the capital and technology- intensive products. The intermediate inputs such as components and parts were exported to the developing economies involving China and Indonesia with the cheap labor forces, abundant natural resources and substantial land elements, and these developing economies finished the downstream production processes of the labor intensive, thus the new production division of labor model as East Asia production network was formed inside the East Asia region.

1.1 Rapid Development of Free Trade Area Promotes the Change for the Division of Labor Mode Inside the East Asia Region

Before the mid- 1980s, due to differences of the developmental level, different economic scale, and the distinction of the factor endowment among various countries of East Asia area, various countries adopted "double- track system" development strategy, and the cooperation inside the region also was in the very superficial stage. During 1985 and 2000, various countries began to pay attention to the export- oriented strategy due to the impact of the economic globalization, and began to adopt the mode of unilateral liberalization to accelerate the economic cooperation with other countries in order to give full play to their respective comparative advantages. After 2000, East Asian countries strengthened the economic cooperation inside and outside the region, and the free trade area gained the mushroom growth. Till the end of November 2010, various effective FTAs have been up to 43 which the East Asian countries reported to WTO, covering 20.9% of total FTAs/ RTAs which each member reported to WTO. Three were more than 50 FTAs which has been signed without taking effect, has been negotiating and has finished the joint research (Zhang, 2011).

Table 1
Conditions for Establishment of Free Trade Area by Main Countries of East Asia (2010)

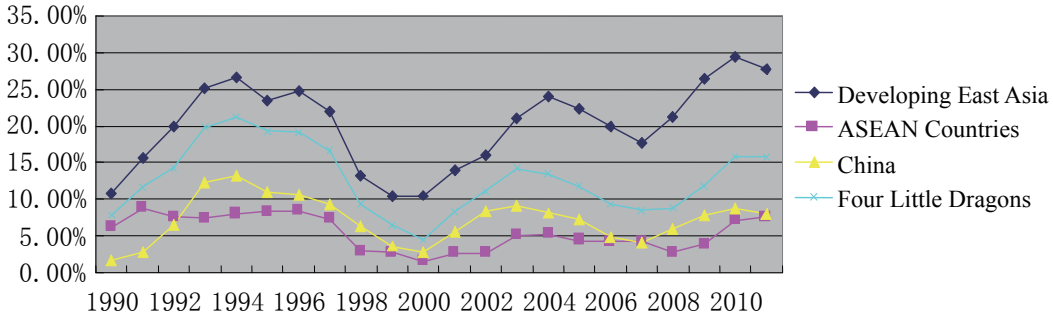
Name of Country	Free Trade Area in Progress	Free Trade Area in Negotiation or Recommendation
China	10	12
Japan	11	9
Korea	6	18
Philippines	6	5
Singapore	18	12
Thailand	11	12

Data source: Masahiro Kawai, Free Trade Agreements in East Asia: A Way toward Trade Liberalization? ADB, No. 1 June 2010. p3.

With the reduction of the unilateral tariff level of various countries in East Asia, some engineering level inside the region were finer, the economic dependence among various countries enhanced continuously, and the division of labor mode inside the East Asia region also adjusted continuously. Asian manufacturing matrix (Baldwin, 2007) was more complex. Meanwhile, the rapid development of the free trade area, free flow of goods in each free trade area, and the gradual reduction of tariffs inside the region also speeded up the fining of the trade division of labor mode. After 2000, China, Malaysia and Thailand became the main suppliers for components and parts of East Asia, and China gradually became the main processing workshop of the Asian factory. East Asia region began to show the characteristics of openness, dynamics, multi-path and multi-velocity, which urges the continuous deepening of specialization level among various countries inside the region, forms "Fragmentation of Production Network"[2] in East Asia, and increase the concentration ratio of the intermediate goods trade inside the region. In 2008, the trade inside the Asian region accounted for 58% and the final manufactured goods accounted for 45%, including 56.3% in East Asia, 1.2% in Central Asia, and 1.3% in South Asia for components and parts trade. For the final manufactured goods trade, East Asia accounted for 43.4%, Central Asia accounted for 2.9%, and South Asia accounted for 2.8%.[3] Therefore, it was exactly known as "East Asia Processing Factory" rather than "Asia Processing Factory".

1.2 Foreign Direct Investment Further Promotes the Deepening of East Asia Regional Production Network

In the East Asia region, the developed economies involving Japan regarded FDI as the carrier, carried out the industrial transfer for late- comer economies involving China and ASEAN, which not only is beneficial to the domestic industrial structure upgrading, but also can incorporate the late- comer economies into their own regional production division system for the decentralization production. Furthermore, on the other hand, as for these late- comer economies, the introduction of FDI can solve the financial matters of the development, also help their own industrial structure optimization and upgrading, and blended into the production division system of the developed countries. Therefore, we can say that FDI expansion inside the East Asia region played an important role in promoting the formation of the East Asia production network.



Data source: UnstadStat- Statistical database, UNCTAD. Org

Figure 1
Proportion of East Asia FDI Inflow in the World

From the above figure, the developing countries of East Asia actively attracted the foreign investment, and the proportion of FDI introduction volume in the world showed the upward trend and descended under the influences of Asian economic crisis in 1997 and financial crisis in 2008. In 2010, the proportion of attracting FDI by the developing East Asia accounted for nearly 30% in the world, which increased for nearly two times than 10.55% in 2000. Specifically, FDI attracted by the developing

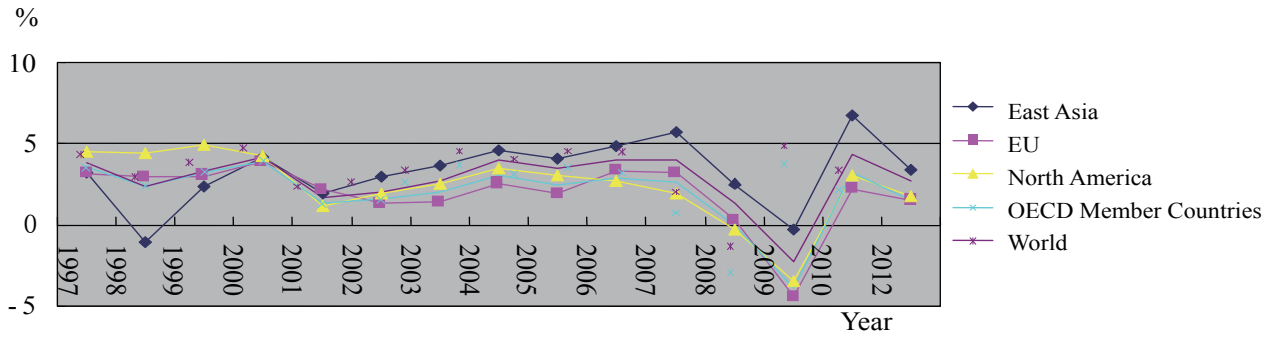
[2] Fragmentation of Production Network": different parts of one product is produced in different regions and different countries studies by Jones and Kierzkowski (1990) and means comprehensive of localization, fragmentation and multi-stages production later studies by Cheng and Kierkowsk 2001, IDE, (2005).
[3] ADB, Institutions for Regional Integration----Toward an Asian Economic Community, p31.

East Asia increased to USD 423,157,000,000 in 2011 from USD 147,787,000,000 in 2000. FDI attracted by China increased to USD 123,985,000,000 in 2011 from USD 40,715,000,000 in 2000. Total FDI introduction volume of ASEAN countries increased to USD 116,559,000,000 in 2011 from USD 22,696,000,000 in 2000.

Beside the above factors, the reduction of the production cost arising out of the wage differentials is also the key factor of promoting the development of the East Asia regional production network. Supposed that the trade cost was rather small, the interaction between the factor intensity and factor price differences existing among the potential host countries would become the key factor of determining to participate in the international production network division. Some demonstrations indicated that multinational corporations tended to build different production stages in different countries in order to reduce the production cost. Kimura (2006) proved that East Asia formed a regional production network because the multinational corporations paid attention to the wage differentials while selecting the production place.[4] Athukorala (2008) held that the significant wage differentials in the East Asia and Southeast Asia made the production network inside the region expand rapidly, and generated more and more cross- border components and parts trade.

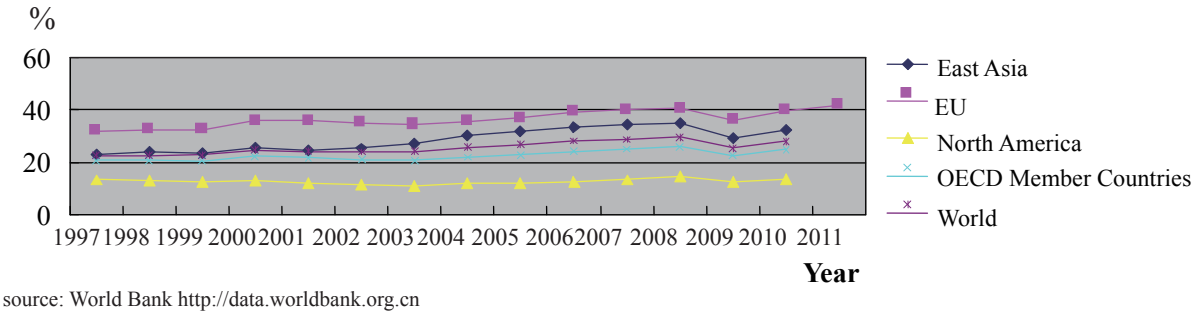
2. CHARACTERISTICS OF EAST ASIA REGIONAL PRODUCTION NETWORK

With the swift development of the East Asia free trade area and massive inflow of the foreign direct investment, East Asia gradually formed the perfect regional production network, and the trade volume and the economic growth rate ranked the first in the world. The status in the international production network highlighted increasingly, which played a role in pulling the world economic growth. From Figure 1, GDP growth rate of East Asia in recent years has always been in the relatively high level since 2001, which was higher than the growth level of the world GDP. Moreover, GDP growth level of the countries and areas involving EU, North America and OECD had always been lower than GDP growth level of the world since 2001. From the proportion of goods and service trade exporting in the main areas of the world covering GDO in Figure 2, East Asia was next only to EU, while being higher than the level of the world, North America, and OECD member countries.



Data source: World Bank http:// data.worldbank.org.cn

Figure 2
GDP Growth Rate Variation Situation in Main Areas of the World



Data source: World Bank http://data.worldbank.org.cn

Figure 3
Proportion of Goods and Service Exporting Trade in the Main Areas of the World Covering GDP

The East Asia production network mainly included as follows, importing the mechanical components and parts from Singapore, Philippines, Malaysia and Thailand in Southeast Asia, and Japan, China and Korea in Southeast Asia. At present, Indonesia, Vietnam, Myanmar, Cambodia, and Laos gradually participated in East Asia

[4] Kuroiwa, Ikuo (2006). Economic Integration in East Asia and Changes in Production Networks. Chapter 1 in Regional Cooperation Toward the Establishment of an East Asian Community-with a View to Asia in 2020.Japan Centre for Economic Research.

regional production network. The major participation industries were mechanical, electrical and transportation equipments. By deepening of the East Asia production network, some distinctive characteristics are displayed.

2.1 Decentralization of East Asia Production Network

The formation of the East Asia production network is based on the decentralization of the productive process, i.e. the producer separates the productive process of the same product in different sections, and organizes the production in accordance with the factor endowments of various countries and areas. From the industrial point of view, the separability of the product manufacturing, complexity of the production technology, and the value weight ratio were different for different industries, thus the intra-product division of labor density of different industries was also different. In view of high separability of the product manufacturing in the electronic industry, and large differences of the technical complexity in different links, it has always been the major industry in the intro-production international division of labor[5].

The East Asia free trade area urged the internal division of labor mode in the East Asia region to show the production system focusing on the vertical integration, which is supplemented by the horizontal integration, especially the intermediate goods trade has become the foremost constituent part in East Asia intra-regional trade. Since the late twentieth centuries, the components and parts trade began to be the chief component of East Asia regional trade structure. The components and parts trade volume inside the East Asia region rose year by year, from USD 25,400,000,000 in 1998 to USD 2,597,700,000,000 in 2010, covering 35% of the total goods trade volume inside the East Asia region. Compared with the components and parts trade, the proportion of the final consumption goods trade volume inside the East Asia region in the total goods trade volume inside the East Asia region has always sustained at the level of more than 10% from 1998, only with 26% in 2003.[6] It was thus clear that the growth rate of the components and parts trade inside the East Asia region was much faster than the growth rate of the final consumption goods trade volume, which was also an important embodiment for the decentralization of the East Asia regional production network.

Preferential rules of origin made the intra-regional division of labor possess the decentralization. The preferential rules of origin in various free trade areas of the East Asia regions are about 100 to 300 pages, mainly focusing on the manufacturing industry. The preferential rules of origin for free trade area among the member countries inside the East Asia region mainly regarded the preferential rules of origin in China- ASEAN free trade area as the template, i.e. based on the change of the tariff catalogue, the regional value content standard was about 40%. For the cumulative mode, besides the diagonal cumulation of ASEAN- China and ASEAN- Korea,, other free trade areas were bilateral cumulation. The free trade areas established by the wheel axle of the countries such as Japan, ASEAN, China and Singapore made the rules of origin combine with the production stages more closely, and intensified the cohesion and dispersion effect of the industry in East Asia regional production network. In order to enjoy the regional preferential treatment, the products in the same country should meet the rules of origin. The rules of origin restricted the selection of the producers in the member countries. The producers can only purchase the intermediate inputs with the relatively high cost from the member countries inside the region, and then export to other member countries after processing and producing to be the final products so as to meet the rules of origin. Take the production of the tractor as an example, if a Malaysian enterprise used the components and parts of other countries to produce the tractor, and then exported to Japan and China for sales, VC should reach 40% in accordance with the provisions of the preferential rules of origin in Japan- Malaysia, and Japan- ASEAN, and also VC should be 40% in accordance with the provisions of the rules of origin in China- ASEAN. Thus, in order to enjoy the regional preferential treatment, Malaysian enterprise mostly used the components and parts of China for the tractor exporting to China, and mostly used the components and parts of Japan or ASEAN for the tractor exporting to Japan. Kuroiwa (2006) discovered that the value contens of the productive process in East Asia reduced continuously. Urata (2006) proved that the vertical division of labor of the intra-industry trade among the member countries in East Asia developed continuously, and the trade of the intra-regional manufactruring industry enhanced continuously, almost forming the integral supply chain. In addition, the cumulative rules adopted by the free trade area of the East Asia region also enabled the member countries to purchase the raw materials and intermediate inputs in more extensive fields, and further promoted the fining of the East Asia production division of labor and the diversification of the configuration for the production location. Estevadeordal and Suominen (2005) summarized that the rules of origin applied to the regional production chain. The rules of origin connected with the regional production division of labor closely, which became the important cause for the "Fragmentation" of the East Asia division of labor. The regional value content standard and cumulative rules in the preferential rules of origin in various free trade areas of East Asia had more obvious influences on the regional production

[5] Pu hualin. The Decision Factors of Intro-Production International Division of Labor — Based on the Empirical Analysis on Parts Trade in China. International Trade Issues.
[6] Data Source: Calculated Basing on UN COMTRADE.

division of labor system relative to the tariff catalogue change and provisions. Ikuo Kuroiwa has ever adopted the calculation method of the direct measurement. The analysis concluded that the content standard and cumulative rules of the manufacturing sectors made the intermediate inputs of China and Korea enhance greatly, while the inputs from Japan had very small extent of increase. Meanwhile, the dynamic production division of labor system in East Asia region improved the necessity of the intermediate inputs importing from the partner countries, especially focusing on the electrical appliances, motorcycle and other manufacturing sectors. It made the preferential rules of origin blend with the production division of labor chain in the East Asia region together, resulting in the interactivity and intensifying the decentralization. Moreover, the stricter the preferential rules of origin were, the more serious the decentralization of the regional division of labor was.

Table 2
Restriction Indexes of Preferential Rules of Origin in East Asia Free Trade Area

Free Trade Area	Japan — Malaysia	Japan — Singapore	Japan -- Thailand	Korea — Singapore	China — Pakistan	ASEAN	ASEAN — China	ASEAN — Korea	Singapore — Australia	Singapore — USA	Thailand — Australia
Tractor	4	2	4	5	4	4	4	4	5	5	5.5

Note: The author calculated and gained from the calculation method of the above restriction indexes and the contents for the preferential rules of origin in East Asia free trade area.

Table 3
Components and Parts Trade, Final Consumption Goods Trade and Total Goods Trade Volume in East Asia

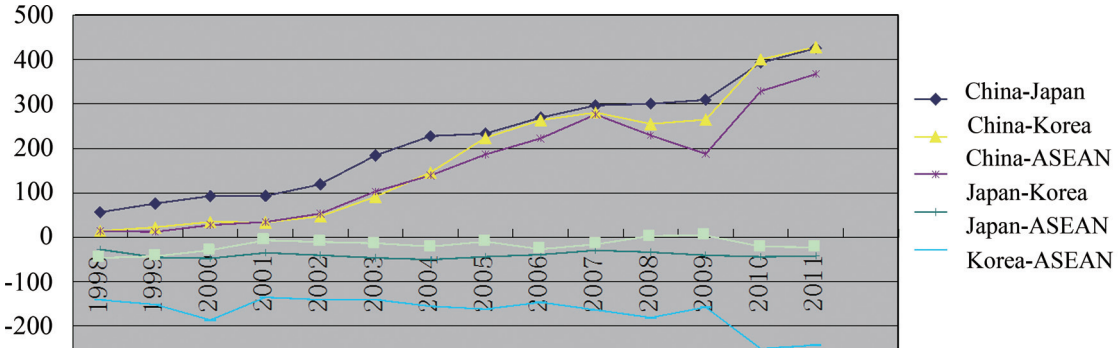
Year	Total components and parts trade volume in East Asia region (Hundred million USD)	Final consumption goods trade volume in East Asia region (Hundred million USD)	Total goods trade volume in East Asia region (Hundred million USD)	Proportion of components and parts trade volume	Proportion of final consumption goods trade volume
1998	254	2860	18435	1.40%	16%
1999	2456.72	3956	20121	12%	20%
2000	3459.96	4452	24784	14%	18%
2001	3935.4	4352	22731	17%	19%
2002	5265.52	4722	24450	22%	19%
2003	7490.44	5441	20920	36%	26%
2004	10370.52	6362	36880	28%	17%
2005	12939.88	7131	43370	30%	16%
2006	16424.4	8121	68895	24%	12%
2007	19677.8	8949	58824	33%	15%
2008	21771.52	10205	68932	31%	15%
2009	19398.76	8812	55640	35%	16%
2010	25976.76	11160	73290	35%	15%

Data source: It is calculated by UN COMTRADE.

As per the classification method of the general economic category by the United Nations Statistics Division, BEC-42 and BEC-53 are components and parts, BEC-112, BEC-122, BEC-51, BEC-522 and BEC-6 are final consumption goods.

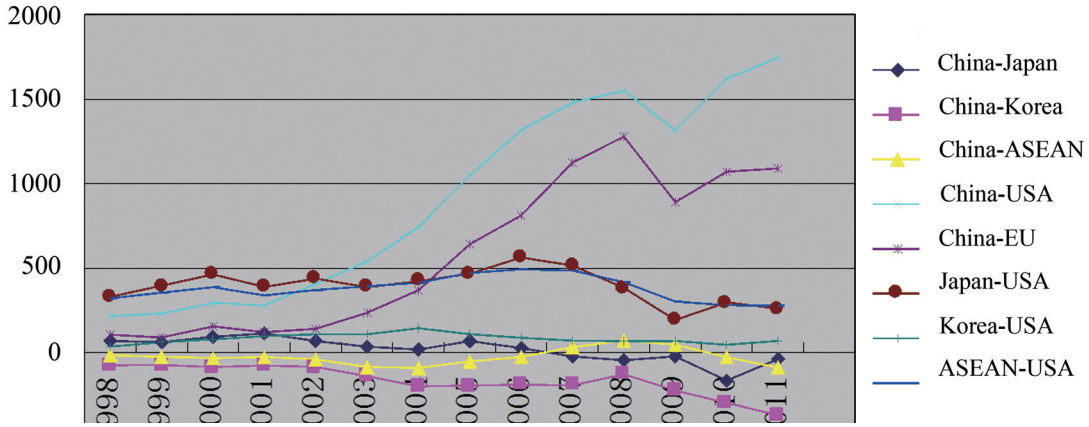
2.2 Formation of "Star Trade" Pattern

From the trade structure for components and parts in East Asia (Figure 4), the components and parts trade for China to Japan, Korea and ASEAN had always showed the favorable balance of trade with rising year by year. Moreover, the components and parts trade for Japan to Korea and ASEAN had always been in the unfavorable balance state on the contrary, and the trade for Korea to ASEAN was basically balanced, i.e. the components and parts inside the East Asia region mostly flowed to China. From the trade of the final products (Figure 5), the trade net exports of the final products for China to USA and EU were far more than the favorable balance of trade in final products for Japan, Korea and ASEAN to USA, i.e. the final products inside the East Asia region mainly input to other countries outside the region by China. It indicated that the East Asia production network has formed new "Triangular Trade" structure, i.e. other economies of East Asia exported a large number of components and parts as well as other intermediate goods to China, and then exported to the developed countries outside the region such as USA and EU by the forms of manufactured goods or semi-manufactured goods after processing and assembling in China. Kim, Won Bae (2011) stated that East Asia formed the interdependence mode centering on China.



Data source: It is calculated and drawn by UNCOMTRADE data.
Note: Here EU means 15 countries involving France, Italy, Netherlands, Belgium, Luxembourg, Germany, Ireland, Denmark, UK, Greece, Portugal, Spain, Austria, Finland, and Sweden.

Figure 4
Favorable Balance of Trade for Components and Parts among Main Countries and Regions in East Asia (Unit: Hundred million USD)



Data source: It is calculated and drawn by UNCOMTRADE data.

Figure 5
Trade Net Export of Final Products Among Main Countries in the World (Unit: Hundred million USD)

2.3 Vulnerability of East Asia Regional Production Network

As for the characteristic of triangular trade displayed by the regional production network of the East Asia, Japan produced and exported the high-end capital goods and intermediate goods, East Asia "Four Little Dragons" produced and exported the general capital goods and intermediate goods, ASEAN countries (Malaysia, Indonesia, Thailand, Philippines) and China took part in the exporting of the components and parts as well as the final products upon processing and assembling, and then the final products exported to USA or EU. Such trade structure made the production status and progit level of East Asia regional prouction network greatly depend on the demand status of the final manufactured goods. Therefore, this mode promoted the economic growth of East Asia member countries and enhanced the competitiveness of the East Asia economies, however, the dependence of the final manufactured goods on the countries outside the region strengthened the vulnerability of the regional production network. If USA or EU reduced the demand of the final manufactured goods arising out of the economic crisis or other economic impact, the products produced by East Asia regional prouction network could not find the market, and the product value could not be achieved. Firstly the export industry of China will suffer the impact, and accordingly the relevant industry of the East Asia would be involved, and the economic growth would be confronted with the risks. Ikuo and Hiroshi (2011) analyzed the delivery mechanism that the American financial crisis influenced 9 economies of East Asia, and proposed that the economic crisis would impact on the regional production network through four channels. First is components and parts production network, especially the electronic industry. Second is raw material network of the industry, especially the chemistry and metal. Third is the main goods network, especially the mineral products. Fourth is the service network, especially the trade and transportation service. Thus, the trade growth of the East Asia components and parts as well as the final assembly exceeded the growth of the world trade in the manufacturing industry, but it did not yet decrease the dependence on the world trade. The dynamic development of the regional network also

depended on the demand of the final products outside the region. This mode determined the vulnerability of the East Asia regional production network.

3. STATUS ANALYSIS OF CHINA IN EAST ASIA PRODUCTION NETWORK

The degree of participating in the regional production network by a country can mainly be reflected from two indexes, involving the logistics performance index and the intra-industry trade index.

3.1 Logistics Performance Index

The degree of participating in the regional production network by a country can be from two indexes. First is the logistics performance index. The development status of the regional network was related to the connection degree of the service. Therefore, if the logistics performance index of a country is higher, the degree of participating in the regional production network is higher. The World Bank calculated the ranks for the logistics performance index of some countries in 2012, involving China of 26, India of 46, Indonesia of 59, and Thailand of 38. It is thus clear that the logistics performance index of China had higher ranks, indicating the degree of participating in the regional production network by China is relatively deep.

3.2 Intra-industry Trade Index

Grubel and Lioyd (1975) put forward the calculation formula of the intra-industry trade index. Mochamad Pasha calculated the intra-industry trade index of China, India and Indonesia from 2004 to 2008, as shown in the following table:

Table 4
Intra-Industry Trade Index

Country	Intra-industry Trade Index				
	2004	2005	2006	2007	2008
China	0.87	0.89	0.91	0.94	0.95
India	0.76	0.83	0.81	0.72	0.68
Indonesia	0.89	0.93	0.99	0.98	0.81

Data source: linkages between regional trade agreement and international production networks: evidence from five case studies in Asia (Pasha, p.51).

From the data by the above calculation, the intra-industry trade index for China to India and Indonesia was the highest, and also was as close as 1. It was thus clear that the degree of participating in the regional production network was the deepest.

Table 5
Intra-Industry Trade Index of Electrical Appliances (SITC-77) Products among Main Countries in East Asia

	China- Japan	China- Korea	China- Singapore	China- Thailand	China- Korea	Japan- Singapore
2002	0.44	0.44	0.89	0.51	0.7	0.39
2003	0.41	0.38	0.74	0.42	0.72	0.45
2004	0.45	0.38	0.79	0.44	0.7	0.44
2005	0.49	0.33	0.82	0.4	0.7	0.39
2006	0.5	0.36	0.92	0.38	0.78	0.45
2007	0.49	0.4	0.96	0.35	0.84	0.46
2008	0.54	0.45	0.88	0.41	0.84	0.47
2009	0.51	0.39	0.9	0.41	0.76	0.62
2010	0.53	0.37	0.96	0.45	0.8	0.49
2011	0.55	0.38	0.99	0.55	0.82	0.54

Data Source: The author calculated and gained from the calculation method from Grubel and Lioyd (1975) put forward the calculation formula of the intra-industry trade index.

Since participating in the East Asia production network, the foreign economy gained the rapid expansion, and had developed into the second largest trade country globally. At the same time, in view of the factor endowment of China and other elements, China had gradually become the gathering place for the intermediate goods of the East Asia production network, and is at the core of the East Asia production network.

4. POLICY SUGGESTIONS FOR PROMOTING STATUS OF CHINA IN EAST ASIA PRODUCTION NETWORK

A series of problems faced by China in East Asia production network were caused by the external factors such as the regional production network, and also caused by the national conditions of China. We can guide and reply for the external cause, while needing constant reformation and innovation for internal cause.

4.1 Enhance FTA Use Ratio by Enterprise

The swift development of free trade area will play a significant motivation role in deepening the regional production network. However, due to the problems such as differences for preferential rules of origin in different free trade areas and the insufficient information of the preferential policy in free trade area by the enterprise, it resulted in the relatively use ratio for free trade area by the enterprise, and seriously restricted the development of the regional production network. According to the survey of JETRO in 2011, there were 2008 companies surveyed in Northeast Asia, and the effective rate of the response was 47.8%, with 37.2% of enterprises using the preference of

the free trade area in exporting and 33.9% of enterprises using the preference in importing. In China, 26.5% of companies used the preference of the free trade area, 44.1% in Korea, 42.9% in Malaysia, 40.6% in Singapore, 37.6% in Philippines, and 64.4% in Indonesia. From the survey results, China is the country with the lowest rate of using the preference of the free trade area, which not only influenced the profit earning of the enterprise, but also restricted the degree of participating in East Asia production network by the enterprise. At the same time, most companies should cost too much on gaining the certificate of origin and spend a long time in applying the certificate of origin to a great degree, so they shrank back at the sight of the preference of the free trade area. In China, 24.3% of enterprises deemed that gaining the certificate of origin took too long, 15.6% of enterprises deemed that the procedure of gaining the certificate of origin was too complex, and 16.8% of enterprises lacked of the staffs for dealing with the problems relevant to the free trade.[8] Thus, the main problem of hindering the Chinese enterprises to use the preference of the free trade area was the problem about the certificate of origin.

Accordingly, our country should actively enhance the personnel training of the relevant administrative agencies involving the customs, so as to reduce various artificial poor efficiencies. Meanwhile, our country should simplify the procedures related to the application and issuance of the rules of origin to the greatest extent, use the existing information to decrease the requirements of the additional data and relevant documents, use the information technology and adopt the digital certificate to boost the paperless application and issuance processes for the rules of origin, shorten the application time, and improve the administrative efficiency. The simple and easily applied rules enabled the enterprise to understand and accommodate in a relative short time, reduce the enterprise management cost, information cost, labor cost and other adaptability costs, further enhance the FTA use ratio by the enterprise, and facilitate the development of the intra-regional trade. In addition, it is necessary to expand the publicity, increase the awareness of the rules of origin by the enterprise, and avoid the low use ratio of FTA arising out of a lack of the awareness.

4.2 Coordinate and Unify the Rules of Origin Gradually, and Reduce the Management Cost of Origin

In East Asia, the eclipsed free trade area with ASEAN, Japan, China, Singapore and Thailand as the wheel axle was generated, resulting in the overlapping and intersection of the rules of origin, and increasing the cost for the production strategic adjustment of the enterprise. The differences for the rules of origin not only caused the administrative cost, but also enhanced the production cost, and further had the comparatively large influence on the small producer relative to the large producer in the axle countries. Preferential rules of origin of various free trade areas in East Asia contained the regional value content standard. If the standard of rules was not clear, the government regulator would be relatively subjective during the judgment, which easily produced the rent seeking. According to the survey on the international operation conditions of Japanese enterprises by Japan External Trade Organization in 2006, among 97 multinational corporations of Japan using and preparing for using East Asia FTA, about 30% of enterprises sensed different rules of origin and increased the trade cost and the complex degree of commercial activities. Besides, 33% of enterprises anticipated that the cost arising out of the rules of origin would be added in the future. 64% of enterprises hoped the rules of origin of East Asia FTA could be unified, among which 24.7% of enterprises hoped that East Asia FTA could selected one of VC and CTC as the unified rules of origin (Erlinda, 2008). Therefore, in view of an interdependence entirety for production and processing of East Asia, it is necessary to accelerate the progress of 10+ 3 free trade area, and meantime unify the preferential rules of origin, and reduce the cost arising out of the differences of rules.

As for the influence degree of the preferential rules of origin on China in East Asia import and export trade, this paper adopted the demonstration method to analyze the relevance between the preferential rules of origin and the China-ASEAN components and parts trade. Through the introduction of the origin restrictive index, the origin restrictive indexes after 2003 were be set as 1, i.e. China and ASEAN free trade agreement and the preferential rules of origin began to play a role since 2004. From the analysis results, the import of components and parts from China to ASEAN doubled after introducing the rules of origin.

Furthermore, for the management of the origin, the self certification method should be adopted to the greatest extent, so as to reduce the arbitrariness due to the verification and supervision of the government, and improve the efficiency gained by the origin. The survey by Kawai Wignaraja indicated that, 10.8% of Korean enterprises, 22% of Thailand enterprises, and 30.6% of Philippine enterprises considered that the time wait for gaining the certificate of origin and the management cost were the reason of hindering the usage of FTA (Xu, 2010). The convenience of the information technology can be used, and the digital certificate and electronic verification system can be adopted properly, so as to improve the efficiency of rules.

[8] JETRO BANGKOK (2012). Making Sense of Rules of Origin — Applying for ASEAN FTA Certificates of Origin.

4.3 Perfect the East Asia Regional Production Network, and Promote the Medium-Sized and Small Enterprises to Enter the Regional Production Network

In case of enabling the enterprise to profit from the regional production network, an attractive production network should be created. It is necessary to adopt the following measures.

(1) Promote the comprehensive trade liberalization, involving the unilateral liberalization, regional liberalization and multilateral liberalization.

(2) Merger trade and liberalization of the investment. The trade protection can increase the investment momentum of the multinational corporations, but it had better attract the investment by the liberalization of the investment. Thus it will make the investor pursue the efficiency but not just gain the market, and the selection for the investment place depends on the cost advantage during the process of the vertical integration.

(3) The service relevant to the manufacturing industry should be promoted. The investment on the manufacturing industry and related services will greatly improve the efficiency of the production network. However, the services in some countries are still in the monopoly phase. So it distorts the efficiency of the service provider.

Meanwhile, as for the participating enterprises, large enterprises mainly participate in the regional production network at present. The production network is short of the competitiveness for the medium-sized and small enterprises, with the relatively insufficient financial resources, technology and organizational capability, so it is necessary to take some measures to attract the medium-sized and small enterprises to enter the regional production network.

(1) Quicken the realization of the economy of scale. The medium-sized and small enterprises possess very large elasticity, and can adapt to the market demand with the rapid change and adapt to the technical development quickly. The overflow effect for the knowledge and technology of the medium-sized and small enterprises is accelerated, so as to meet the requirements of massive orders of the international production network, and realize the economy of scale through the e-commerce.

(2) Strengthen the relationship between the domestic producer in the vertical chain and the global production chain. At the top of the chain, strengthen the relationship between the national export and the international buyer as well as the global supplier. At the bottom, strengthen the connection between the high level supplier and the lowest level supplier (medium-sized and small enterprises). The multinational corporations introduce the medium-sized and small enterprises to the regional production network by the means of outsourcing, which is helpful for the domestic employment and local volume construction.

(3) Enhance the capability of participating in the regional production network by the medium-sized and small enterprises. In order to participate in the regional production network, the medium-sized and small enterprises must select a certain specific parts, and can produce the quality of meet the demand for the production network, as well as the labor conditions and environment. At the same time, assist the medium-sized and small enterprises to perfect their capability and contest force of participating in the international production network through the cooperation among the enterprises.

(4) The medium-sized and small enterprises can help the sustainable development of the regional production network. The government should adopt various policies to encourage the multinational corporations establishing the relationship with the Chinese medium-sized and small enterprises, and enhance their international competitiveness. Many countries formulate the incentive measures and corresponding preferential tax policy for the medium-sized and small companies, and help these companies become more effective in the international supply chain.

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